

AMENDMENTS TO THE CLAIMS:

Please replace the prior listing of claims in the application with the following listing of claims:

1. (Currently amended) A method for co-locating a feed mill and a cane sugar mill to synergistically grow and process ~~of processing~~ a legume fodder crop (as hereinbefore defined) with sugar cane, including the steps of:

(a) providing a said cane sugar mill;

(b) providing a said feed mill, said feed mill being located at/adjacent to said cane sugar mill;

(c) growing said legume fodder crop as a soil enhancing fallow crop for sugar cane to be processed at said cane sugar mill;

(d) delivering with minimum delay, freshly harvested legume fodder crop to said feed mill located at/adjacent to said cane sugar mill;

~~(d)~~(e) processing the crop to seek optimised cell breakage and/or fibrisation (separation of fibre particles) in the resultant shredded material, depending on final product specifications as required; and

~~(e)~~(f) drying the shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce a dried animal feed material, suitable for long term storage.

2. (Currently amended) A method as claimed in claim 1, including the further step:

~~(f)~~(g) mixing the dried material with suitable liquid binder(s) to produce a feed meal material of suitable moisture content as required for use.

3. (Currently amended) A method as claimed in claim 1, wherein:
in step ~~(e)~~(d), the freshly harvested crop is delivered to the feed mill in bulk using a transport system/infrastructure of the cane sugar mill.

4. (Currently amended) A method as claimed in claim 1, wherein:

in step ~~(d)~~(e), the harvested crop is shredded using heavy duty shredder/hammermill machines.

5. (Currently amended) A method as claimed in claim 1, wherein:
in step ~~(d)~~(e), juice is extracted, concentrated, and stored in liquid concentrate tank(s).

6. (Currently amended) A method as claimed in claim 1, wherein:
in step ~~(e)~~(f), the shredded matter is dried using hot flue gas from the sugar mill boiler, or from a separate furnace fired with sugar cane bagasse either fresh from the cane sugar mill or from a stockpile.

7. (Original) A method as claimed in claim 6, wherein:
the dried shredded material is separated into coarse (stem) and fine (leaf) dry fibre fractions, which are optionally selectively recombined during later processing.

8. (Currently amended) A method as claimed in claim 2, wherein:
in step ~~(f)~~(g), the liquid binder(s) include molasses, juice concentrate and other suitable liquids to achieve the desired moisture content.

9. (Currently amended) A method as claimed in claim 2, wherein:
during, or after, step ~~(f)~~(g) other ingredients and additives, including vitamins, minerals, digestion improvers, antibiotics and other pharmaceuticals are added to increase the value of the feed meal material.

10. (Currently amended) A method as claimed in claim 2, wherein:
after step ~~(f)~~(g), the feed meal material undergoes further processing such as pelletising, crumbling, granulation, agglomeration, pressure compaction, cubing, extrusion, moulding, tableting, briquetting, baling or bagging to suit the market requirements.

11. (Currently amended) A method for co-locating a feed mill and a cane sugar mill to synergistically grow and process ~~of processing~~ a legume fodder crop (as herein before defined) with sugar cane, including the steps of:

- (a) providing a said cane sugar mill;
- (b) providing a said feed mill, said feed mill being located at/adjacent to said cane sugar mill;
- (c) growing said legume fodder crop as a soil enhancing fallow crop for sugar cane to be processed at said cane sugar mill;
- (d) delivering with minimum delay, freshly harvested legume fodder crop to said feed mill located at/adjacent to said cane sugar mill;
- (~~d~~)(e) processing the crop to produce cut and/or shredded material; and
- (e)(f) drying the cut and/or shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce a dried animal feed material, suitable for long term storage.

12. (Currently amended) A method as claimed in claim 11, including the further step:

- (~~f~~)(g) baling the dried cut and/or shredded material (or hay).

13. (Currently amended) A method as claimed in claim 11, wherein:
in step (~~d~~)(e), the crop is processed using rotary knives to cut and/or shred the fibrous material.

14. (Currently amended) A method as claimed in claim 12, wherein:
after step (~~f~~)(g), the baled material (or hay) is outloaded or containerised for transport.

15. (Currently amended) A method as claimed in claim 12, wherein:
at step (~~f~~)(g), molasses is mixed with the dried material (or hay) to increase the nutritional value thereof.

16. (Currently amended) A method for co-locating a feed mill and a cane sugar mill to synergistically grow and process a legume fodder crop ~~of producing to produce an~~ animal feed product including the steps of:

- (i) growing a said legume fodder crop (as hereinbefore defined) as a soil-enhancing fallow crop for sugar cane;
- (ii) harvesting the crop;
- (iii) providing a said cane sugar mill;
- (iv) providing a said feed mill, said feed mill being located at/adjacent to said sugar mill;
- (v) delivering with minimum delay, freshly harvested crop to said feed mill located at/adjacent to said cane sugar mill;
- (vi) processing the crop to seek optimised cell breakage and/or fiberisation (i.e., separation of fibre particles) in the resultant shredded material, depending on final product specifications as required; and
- (vii) drying the shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce an animal feed material.

17. (Previously presented) A method as claimed in claim 16, including the further step:

- (viii) mixing the dried material with suitable liquid binder(s) to produce a feed meal material of suitable moisture content if required for use.

18. (Currently amended) A method for co-locating a feed mill and a cane sugar mill to synergistically grow and process a legume fodder crop ~~to producing produce an~~ animal feed product including the steps of:

- (i) growing a said legume fodder crop (as hereinbefore defined) as a soil-enhancing fallow crop for sugar cane;
- (ii) harvesting the crop;
- (iii) providing a said cane sugar mill;
- (iv) providing a said feed mill, said feed mill being located at/adjacent to said cane sugar mill;
- (v) delivering with minimum delay, freshly harvested crop to said feed mill located at/adjacent said cane sugar mill;
- (vi) processing the crop to produce cut and/or shredded material; and

(vii) drying the cut and/or shredded material using heat supplied by the cane sugar mill or from by-products of the cane sugar mill to produce an animal feed material.

19. (Previously presented) A method as claimed in claim 18, including the further step:

(viii) baling the dried cut and/or shredded material (or hay).

20. (Previously presented) A method for producing an animal feed product including the steps of:

(i) growing a legume fodder crop (as hereinbefore defined) as a soil-enhancing fallow crop for sugar cane;

(ii) harvesting the crop; and

(iii) processing the crop by the method claimed in Claim 1.

21. (Previously presented) A method for producing an animal feed product including the steps of:

(i) growing a legume fodder crop (as hereinbefore defined) as a soil-enhancing fallow crop for sugar cane;

(ii) harvesting the crop; and

(iii) processing the crop by the method claimed in Claim 11.